

## CLAIMS

1. A connector including:

a header comprising a header body formed of an insulation material, and one or a plurality of header posts held on a side wall of the header body; and

a socket comprising a socket body formed on an insulation material and having a plug groove with which the header is engaged, and one or a plurality of socket contacts held on a side wall of the plug groove of the socket body and contacted with the header posts when the header is engaged with the plug groove; characterized by that

the header body has a concave portion on a first face in side which is to be engaged with the plug groove of the socket body;

the header post has a second contact portion disposed along a side wall of the header body and contacted with a first contact portion of the socket contact, a curved portion formed in a substantially reverse U-shape from a vicinity of an end in the first face side of the side wall of the header body toward the concave portion, and a terminal portion formed to protrude outward from a side of the second contact portion opposite to the curved portion to be substantially perpendicular to the side wall and to be soldered on a circuit board; and

the concave portion is separated by at least two cross walls so that an enclosed space is formed by at least two cross walls, a bottom face of the concave portion and the adsorption face of the adsorption

nozzle in a state that the adsorption face of the adsorption nozzle is contacted with the first face so that a suction opening of the adsorption nozzle faces the concave portion.

2. The connector in accordance with claim 1 characterized by that when a plurality of the header posts are arranged, the cross walls are provided for separating each gap between the arranged header posts.

3. The connector in accordance with claim 1 characterized by that

the socket body has an engaging groove of substantially rectangular shape with which the header is engaged formed in center portion thereof seen from front, and four engaging concavities formed in vicinities of both end portions of both side walls, and

when the socket is mounted on a circuit board, an adsorption cover is attached to the socket due to engaging portions of the adsorption cover covering at least a part of the engaging groove are engaged with the engaging concavities of the socket body, and a portion of the adsorption cover covering a part of the engaging groove is adsorbed and held by the adsorption nozzle.

4. The connector in accordance with claim 3 characterized by that

the socket body has inserted or press-fitted reinforcing members in vicinities of both end portions in longitudinal direction thereof; and

the engaging concavities are formed at positions distant from

fixed portions of the reinforcing member.

5. The connector in accordance with claim 1 characterized by that a protrusion and a concavity are serially provided on the second contact portion of the header post along heightwise direction of the header to a second face opposite to the first face.

6. The connector in accordance with claim 5 characterized by that the protrusion is formed at a position a little nearer to the first face from center in the heightwise direction of the header post.

7. The connector in accordance with claim 5 characterized by that a slanted face is formed on an outer face of the protrusion in a manner so that dimension of protrusion at a portion nearer to a second face opposite to the first face becomes larger.

8. The connector in accordance with claim 4 characterized by that the concavity is channel shape elongated along the heightwise direction of the header post.

9. The connector in accordance with claim 8 characterized by that the concavity has two slanted faces depth of which becomes deeper for approaching to the center in the widthwise direction so that the section in the widthwise direction of the header post becomes substantially V-shape.

10. The connector in accordance with claim 5 characterized by that a width dimension of the concavity in the widthwise direction of the header post is formed to be larger than a width dimension of the protrusion and smaller than a width direction of the first contact portion of the socket contact.

11. The connector in accordance with claim 5 characterized by that dimensions and position of the concavity in the heightwise direction of the header post is established in a scope that the first contact portion of the socket contact slides on the second contact portion.